Interagency Report Control No

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0001 CUSTOMER NO. 1080

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

 HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

NATIONAL JEWISH MEDICAL & RESEARCH CENTER 1400 JACKSON ST., DOLLA DENVER, CO 80206 (303) 398-1432

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS(sites)

See Attached Listing

SAME AS # 2.

A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C+ D+E)
4. Dogs					0
5. Cats					0
6. Guinea Pigs	83	120			130
7. Hamsters		24	8		32
8. Rabbits	5	65	16		81
9. Non-Human Primates					0
10. Sheep	5				Q
11. Pigs					0
12. Other Farm Animals					0
13. Other Animals					0

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.

 NOV 9 2001
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Chief Executive Officer or Legally Responsible Institutional official)

DATE SIGNED

(AUG 91)

Interagency Report Control No 0180-DOA-AN

12614101

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. REGISTRATION NO. 84-R-0003

CUSTOMER NO. 1195

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA,

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

include Zip Code) COLORADO STATE UNIVERSITY 203 ADMINISTRATION

FORT COLLINS, CO 80523 (303) 491-7364

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.) FACILITY LOCATIONS(sites)

See Attached Listing REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use APHIS FORM 7023A)				,		
	See Attached Listing					
	Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in	C. Number of animals upon which teaching, research, experiments or	Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic analoesic or tranquilizing drugs would	TOTAL NO. OF ANIMALS

REPORT OF ANIMALS USED BY			(Attach additional sheets if nece	ssary or use APHIS FORM 7023A)	
A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which leaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cois. C+ D+E)
4. Dogs	4	136	82		218
5. Cats	203	39	163		202
6. Guinea Pigs		391			_391
7. Hamsters		64	60		124
8. Rabbits		186	62		248
9. Non-Human Primates					
10. Sheep		. 7	433		440
11. Pigs			354		354
12. Other Farm Animals					
Cattle		6	7		13
13. Other Animals				HE E E E W E TO	
Horses			32	The second of th	32
Ferrets		23		NOV 2 0 2001	23
Marmots			12		12
ASSURANCE STATEMENTS				Uouth Attigo, 52 to 10	

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthatic, analysis, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other

aspools of difficult out of a	114 666,		
	(Chief Executive Officer or Lega	TERS RESEARCH FACILITY OFFICIAL (III) Responsible Institutional official)	
SIGNA			DATE SIGNED
			11/13/01
APHIS	freeligen in a million of the fact and immediate apparent	Technology	 <u> </u>

(AUG 91)

APHIS Form 7023 Site List

The following sites have been reported by the facility.

Registration Number:

84-R-0003

Customer Number:

1195

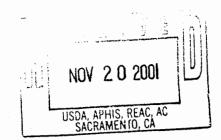
Facility:

COLORADO STATE UNIVERSITY

203 ADMINISTRATION FORT COLLINS, CO 80523

(303) 491-7364

COLORADO STATE UNIVERSITY FOOTHILL CAMPUS & VET. TEACHING HOS. FORT COLLINS, CO 80523



additional information.

Interagency Report Control No 0180-DOA-AN 1702

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0008

CUSTOMER NO. 1087

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY (TYPE OR PRINT)

include Zip Code)

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, UNIV. OF NORTHERN COLORADO

PRES.'S OFFICE, CARTER 4000 DEPT. OF BIOLOGICAL SCIENCES **GREELEY, CO 80639** (970) 351-2921

sheets a necessary.)					
		F	ACILITY LOCATIONS(sites)		
See Attached Listing		•			
REPORT OF ANIMALS USED BY	OR UNDER CONTROL C	F RESEARCH FACILITY	(Attach additional sheets if nece	SSERY OF USE APHIS FORM 7023A)	
A.	B. Number of	C. Number of	D. Number of animals upon	E. Number of animals upon which teaching,	F.
Animals Covered	animals being bred,	animals upon which teaching,	which experiments, teaching, research,	experiments, research, surgery or tests were conducted involving accompanying pain or distress	TOTAL NO.
By The Animal	conditioned, or	research,	surgery, or tests were	to the animals and for which the use of appropriate	OF ANIMALS
Welfare Regulations	held for use in teaching, testing,	experiments, or tests were	conducted involving accompanying pain or	anesthetic, analgesic, or tranquitizing drugs would have adversely affected the procedures, results, or	(Cols. C+
	experiments, research, or	conducted involving no	distress to the animals and for which appropriate	interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of	D + E)
	surgery but not	pain, distress, or	anesthetic, analgesic, or	the procedures producing pain or distress in these	
	yet used for such purposes.	use of pain- relieving drugs.	tranquilizing drugs were used.	animals and the reasons such drugs were not used must be attached to this report)	
4. Dogs	<i>O</i>		<u> </u>		ļ
5. Cats	ð				
6. Guinea Pigs	0				
7. Hamsters	0				
8. Rabbits	0				
9. Non-Human Primates	0				
10. Sheep	0				
11. Pigs	0				
12. Other Farm Animals	0				
13. Other Animals					
Siberian Ferrets Black-footed ferrets		7			7
Black-footed ferret		8			8
	0	1			j
ASSURANCE STATEMENTS		<u> </u>		La contraction of the second o	

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, pnor to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered atternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report in addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation or the exceptions, as well as the species and number of animats affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of coner aspects of animal care and use.

Chief Executive Officer or Legally Responsible Institutional official)	
	DATE SIGNED
	11/2/01

APHIS FURM (UZ3 (AUG 91)

(Replaces VS FORM 18-23 (Oct 88), which is obsolete

Northern Colorado

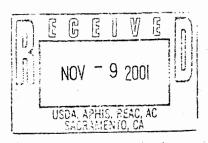
PART 1 - HEADQUARTERS

Annual Report Site Listing:

Customer ID and Site Address:

Cust ID: 1087

Animal Facility Ross Hall Of Sciences Greeley, CO 80639 County: Weld Telephone (970)351-2921



This report is required by law (7 USC 2143). Failure to report according to the regulations can result in an order to cease and desist and to be subject to penalties as provided for in Section 2150. See reverse side for additional information

Interagency Report Control No 0180-DQA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. REGISTRATION NO. 85-R-0010

CUSTOMER NO. 1074

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, CANYON COLORADO EQUID SANCT.

P.O. BOX 60639 COLORADO SPGS, CO 80960 (719) 579-0707

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.) FACILITY LOCATIONS(sites)

See Attached Listing

REPORT OF ANIMALS USED BY	OR UNDER CONTROL O	F RESEARCH FACILITY	(Attach additional sheets if neces		
A. Animals Covered By The Animal Weifare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the leaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report).	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals				%	
			· · · · · · · · · · · · · · · · · · ·		
13. Other Animals					
Grevy's Zebra	0	68	1		69
Harimann Zebra	0	184	30		214
Kulan	0	214	1		215
ASSURANCE STATEMENTS		Hida	2,7	[1] [1] [5] [6] [6] [7] [8] [7]	1 498

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.

9 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report, in addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other

ype or Print)	DATE SIGNED
	11-15-01

PART 1 - HEADQUARTERS

APHISYPURIN 1023

(Keplaces V5 FORM 18-23 (Oct 88), which is obsolete

(AÚG 91)

Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 85-R-0010 CUSTOMER NO. 1074

FORM APPROVED OMB NO. 0579-0036

CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

 CANYON COLORADO EQUID SANCT.

P.O. BOX 60639

P.O. BOX 60639 COLORADO SPGS, CO 80960 (719) 579-0707

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use this form.)					
A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animats upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
Onager	0	19	0		19
Somali Wild Ass	0	6	0		66
Przewalski Horse	0	46	0		46
Kiang	0	3	0		3
Hartmann/Kulan H	ybrid O	7	0		77
Hartmann/Onager	Hybrid O	11	0		1
Przewalski/Kulan	Hybrid O	1	0		1
·					
ASSURANCE STATEMENTS					

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other

ype or Print)	DATE SIGNED
	11/15/01

PART 1 - HEADQUARTERS

APHIS Form 7023 Site List

The following sites have been reported by the facility.

Registration Number:

85-R-0010

Customer Number:

1074

Facility:

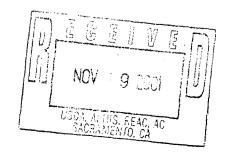
CANYON COLORADO EQUID SANCT.

P.O. BOX 60639

COLORADO SPGS, CO 80960

(719) 579-0707

CANYON COLORADO EQUID SANCTUARY HC 66, BOX 5 WAGON MOUND, NM 87752



Interagency Report odnirol No 7-02 5

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. REGISTRATION NO. 84-R-0011

include Zip Code)

CUSTOMER NO. 1089

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

WESTERN STATE COLLEGE GUNNISON, CO 81231

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA,

(970) 943-2114 3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional

Hurst 23	35B				
110131 00					
REPORT OF ANIMALS USED BY		F RESEARCH FACILITY	' (Attach additional sheets if nece	ssary or use APHIS FORM 7023A)	
A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-Human Primates	·				
10. Sheep					
11. Pigs		,			
12. Other Farm Animals					
13. Other Animals					
deer mice		108	54		162
megdow voles					11
unidentified shrews				- 2	
ASSURANCE STATEMENTS					<u> </u>
			animals, including appropriate use re followed by this research facilit	e of anesthetic, analgesic, and tranquilizing drugs, prior to, y.	during,
2) Each principal investigator (nas considered alternatives	to painful procedures.		NOV = 7 2001	
principal investigator and ar	proved by the institutional	Animal Care and Use Co	mmittee (IACUC). A summary of	standards and regulations be specified and explained by the fall the exceptions is attached to this annual report. In ns, as well as the species and number of animals affected.	. 1

FACILITY LOCATIONS(sites)

CERTIFICATION BY HEADQUARTERS	RESEARCH FACILITY OFFICIA
(Chief Executive Officer or Legally R	esponsible institutional official)

4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

SIGNATU

DATE SIGNED

APHIS F (AUG

Interagency Report Control No-0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0012 CUSTOMER NO. 1090

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

See Attached Listing

 HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

COLORADO MOUNTAIN COLLEGE 3000 COUNTY ROAD 114 GLENWOOD SPGS, CO 81601 (970) 945-8691

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS(sites)

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use APHIS FORM 7023A) E. Number of animals upon which teaching, B. Number of Number of D. Number of animals upon animals being experiments, research, surgery or tests were animals upon which experiments, TOTAL NO. Animals Covered bred. which teaching, teaching, research, conducted involving accompanying pain or distress to the animals and for which the use of appropriate OF ANIMALS conditioned, or By The Animal research surgery, or tests were conducted involving Welfare Regulations held for use in anesthetic, analgesic, or tranquilizing drugs would experiments, or teaching, testing, have adversely affected the procedures, results, or (Cols. C+ tests were accompanying pain or experiments, conducted distress to the animals interpretation of the teaching, research, D + E) research, or involvina na and for which appropriate experiments, surgery, or tests. (An explanation of surgery but not pain, distress, or anesthetic, analgesic, or the procedures producing pain or distress in these yet used for such tranquilizing drugs were animals and the reasons such drugs were not used use of painmust be attached to this report) purposes. relieving drugs. O Ø 16 6 4. Dogs 5. Cats Guinea Pigs 0 7 Hamsters 8. Rabbits 9 Non-Human Primates O 10. Sheep 2 11. Pigs CATTLE 12. Other Farm Animals C Horses 13. Other Animals GOATS

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analysis and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.

<u>0</u>

3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other CA aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL
(Chief Executive Officer or Legally Responsible Institutional official)
Licertify that the above is true, correct, and complete (7.11.S.C. Section 2143)

SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL

Llamas

NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)

DATE SIGNED

10/4/01

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CARL - HEADQUARTERS

APHIS Form 7023 Site List

The following sites have been reported by the facility.

Registration Number:

84-R-0012

Customer Number:

1090

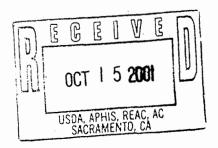
Facility:

COLORADO MOUNTAIN COLLEGE

3000 COUNTY ROAD 114 GLENWOOD SPGS, CO 81601

(970) 945-8691

COLORADO MOUNTAIN COLLEGE 3000 COUNTY ROAD 114 GLENWOOD SPGS, CO 81601



Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0013 CUSTOMER NO. 1092

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

See Attached Listing

 HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

BEL-REA INST. OF ANIMAL TECH. 1681 SOUTH DAYTON STREET DENVER, CO 80231 (303) 751-8700

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS(sites)

REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Altach additional sheets if necessary or use APHIS FORM 7023A) B. Number of E. Number of animals upon which teaching, Number of D. Number of animals upon animals being experiments, research, surgery or tests were animals upon which experiments. which teaching, TOTAL NO. Animals Covered bred, teaching, research, conducted involving accompanying pain or distress By The Animal conditioned, or research. surgery, or tests were to the animals and for which the use of appropriate OF ANIMALS held for use in conducted involving anesthetic, analgesic, or tranquilizing drugs would Welfare Regulations experiments or teaching, testing, have adversely affected the procedures, results, or (Cols. C+ tests were accompanying pain or experiments. conducted distress to the animals interpretation of the teaching, research, D + E) research, or experiments, surgery, or tests. (An explanation of and for which appropriate involving no surgery but not pain, distress, or anesthetic, analgesic, or the procedures producing pain or distress in these yet used for such use of paintranquilizing drugs were animals and the reasons such drugs were not used must be attached to this report) purposes. relieving drugs used 4. Dogs 5. Cats 6 Guinea Pigs 7. Hamsters 8. Rabbits 9 Non-Human Primates 10. Sheep 11. Pigs 12. Other Farm Animals Horse 13. Other Animals 19 200 Gerbils CON THE DEAD NO ASSURANCE STATEMENTS SACRAMENTO, CA

) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.

Each principal investigator has considered alternatives to painful procedures.

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(b)(6), (b)(7)c

telephone Cord? 12/17/01

CERTIFICATION BY HEADQUARTERS	RESEARCH	FACILITY	OFFICIAL
(Chief Executive Officer or Legally Re	esponsible la	estitutional	official)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

L (Type or Print)

DATE SIGNED

PART 1 - HEADQUARTERS

(AUG 91)

Interagency Report Control No

0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. REGISTRATION NO. 84-R-0014

CUSTOMER NO. 8223

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

include Zip Code) COLORADO COLLEGE 14 E. CACHE LA POUDRE

COLORADO SPGS, CO 80903 (719) 389-6000

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA,

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS(sites)

See Attached Listing

111 Chough 137

woms 2334324 REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use APHIS FORM 7023A) E. Number of animals upon which teaching, B. Number of D. Number of animals upon Number of animals being animals upon experiments, research, surgery or tests were which experiments, conducted involving accompanying pain or distress TOTAL NO. which teaching Animals Covered bred. teaching, research, conditioned, or to the animals and for which the use of appropriate OF ANIMALS surgery, or tests were By The Animal research. Welfare Regulations held for use in anesthetic, analgesic, or tranquilizing drugs would experiments, or conducted involving (Cols. C+ tests were teaching, testing, accompanying pain or have adversely affected the procedures, results, or interpretation of the teaching, research, experiments. conducted distress to the animals research, or and for which appropriate experiments, surgery, or tests. (An explanation of invalvina na surgery but not pain, distress, or anesthetic, analgesic, or the procedures producing pain or distress in these yet used for such use of paintranquilizing drugs were animals and the reasons such drugs were not used must be attached to this report) purposes. relievina druas used. 0 0 0 0 4. Dogs 0 0 0 0 5. Cats 0 6. Guinea Pigs 0 0 0 7 Hamsters 0 8. Rabbits 0 0 0 0 0 0 9 Non-Human Primates 0 0 10. Sheep 0 0 11. Pigs 0 0 0 12. Other Farm Animals 0 13. Other Animals

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.

SIGNATURE OF CEO OF INSTITUTIONAL OFFICIAL

- This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Chief Executive Officer or Legally Responsible Institutional official)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

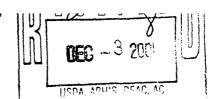
DATE SIGNED

11-28-01

APhia FURINI 1024 (AUG 91)

ASSURANCE STATEMENTS

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NAME & TITLE OF CEO OR INSTITUTIONAL OFFICIAL (Type or Print)

FADI I - IILADQUARTERS

Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. REGISTRATION NO. 84-R-0016

CUSTOMER NO. 1094

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Cade) DENVER HEALTH MEDICAL CENTER

777 BANNOCK ST. **DENVER, CO 80204**

		۶	FACILITY LOCATIONS (sites)		
DENVER HEALTH MEDICAL DENVER, CO 80204	CENTER				
REPORT OF ANIMALS USED BY	OR UNDER CONTROL C	F RESEARCH FACILITY	(Attach additional sheets if nece	ssary or use APHIS FORM 7023.A)	
A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests ware conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits			Ò	·	
9. Non-Human Primates			. ′		·
10. Sheep					
11. Pigs			32		32
12. Other Farm Animals					
Goats			·. 4		4
13. Other Animals					

ASSURANCE STATEMENTS		· 			
Professionally acceptable si		e, treatment, and use of a	animals, including appropriate use	of anesthetic, analgesic, and tranquilizing drugs, prior to,	during,

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional

- and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Chief Executive Officer or Legally Responsible Institutional official) I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)				
SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED		
	·	10/09/2001		

Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0021

CUSTOMER NO. 8224

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

sheets if necessary.)

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code) FORT LEWIS COLLEGE

1000 RIM DR. DURANGO, CO 81301 (970) 247-7010

See Attached Listing					
A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which leaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
chickens		12	-		12
13. Other Animals			<u> </u>		
mice	15	30			30
				OCT 2 2 2001	
ASSURANCE STATEMENTS				THE WAY THE BEST AD	
	andards governing the car	e treatment and use of s	nimals including appropriate use	of anesthetic analoesic and tranquilizing drugs prior to	during

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional

FACILITY LOCATIONS(sites)

- and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility_____
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS	RESEARCH FACILITY OFFICIAL
(Chief Executive Officer or Legally Re	esponsible Institutional official)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

DATE SIGNED

APHIS FORM 7023 (AUG 91)

SI

(Replaces VS FORM 18-23 (Oct 88), which is obsolete

Per Piculous PART 1-HEADQUARTERS
Annual Report Record

APHIS Form 7023 Site List

The following sites have been reported by the facility.

Registration Number:

84-R-0021

Customer Number:

8224

Facility:

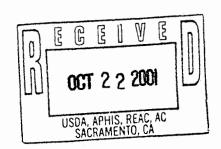
FORT LEWIS COLLEGE

1000 RIM DR.

DURANGO, CO 81301

(970) 247-7010

FORT LEWIS COLLEGE 758 BERNDT HALL DURANGO, CO 81301



Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. REGISTRATION NO. 84-R-0024

CUSTOMER NO.

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

sheets if necessary.)

1095

FORM APPROVED OMB NO. 0579-0036

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

10810 W. COLLINS AVENUE LAKEWOOD, CO 80215 (800) 644-2623

See Attached Listing					
REPORT OF ANIMALS USED BY	OR UNDER CONTROL O	F RESEARCH FACILITY	' (Attach additional sheets if nece	essary or use APHIS FORM 7023A)	
A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	TOTAL NO. OF ANIMALS (Cols. C + . D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits			3		3
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
				n de la	
13. Other Animals				0	
				DEC + 8 2001 U	
				LISOA APHIS, REAC, AC	
ASSURANCE STATEMENTS				SACRAMENIU, CA	
			nimals, including appropriate use re followed by this research facilit	of anesthetic, analgesic, and tranquilizing drugs, prior to,	during,

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional

FACILITY LOCATIONS(sites)

- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL
(Chief Executive Officer or Legally Responsible Institutional official)

I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)

DATE SIGNED

ADQUARTERS

(AUG 91)

APHIS Form 7023 Site List

The following sites have been reported by the facility.

Registration Number:

84-R-0024

Customer Number:

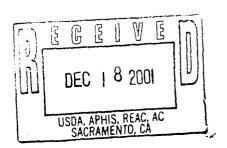
1095

Facility:

10810 W. COLLINS AVENUE LAKEWOOD, CO 80215

(800) 644-2623

GAMBRO BCT 10810 W. COLLINS AVENUE LAKEWOOD, CO 80215



Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0052

CUSTOMER NO. 1286

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

Above location only.

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

GILEAD SCIENCES 2860 WILDERNESS PLACE BOULDER, CO 80301 (303) 444-5893

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.) FACILITY LOCATIONS(sites) See Attached Listing

A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					, 0
5. Cats					0
6. Guinea Pigs					0
7. Hamsters		:			0
8. Rabbits					0
9. Non-Human Primates					0
10. Sheep					0
11. Pigs					0
12. Other Farm Animals					0
13. Other Animals					0
					<u> </u>
ASSURANCE STATEMENTS					

)	Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic,	analgesic	and tranquilizing	drugs, prior ti	o, during,
	and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.	1111	1		
()	Each principal investigator has considered alternatives to painful procedures.		OCT -	- 1 20 0 1	

3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report, in addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL		
(Chief Executive Officer or Legally Responsible Institutional official)		
I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)		
	it)	DATE SIGNED
		0/20/1

(AUG 91)

Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0054 CUSTOMER NO. 1310

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

RIBOZYME PHARMACEUTICALS, INC. 2950 WILDERNESS PLACE BOULDER, CO 80301

FACILITY LOCATIONS(sites) RIBOZYME PHARMACEUTICALS, INC. BOULDER, CO 80301 REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use APHIS FORM 7023A) B. Number of D. Number of animals upon E. Number of animals upon which teaching, C. Number of animals being experiments, research, surgery or tests were animals upon which experiments, which teaching, TOTAL NO. Animals Covered bred teaching, research, conducted involving accompanying pain or distress conditioned, or to the animals and for which the use of appropriate OF ANIMALS By The Animal research. surgery, or tests were Welfare Regulations held for use in experiments, or conducted involving anesthetic, analgesic, or tranquilizing drugs would tests were teaching, testing, accompanying pain or have adversely affected the procedures, results, or (Cols. C+ D + E) interpretation of the teaching, research, experiments. conducted distress to the animals research, or and for which appropriate experiments, surgery, or tests. (An explanation of involving no anesthetic, analgesic, or surgery but not pain, distress, or the procedures producing pain or distress in these yet used for such use of paintranquilizing drugs were animals and the reasons such drugs were not used purposes. must be attached to this report) relieving drugs. used. 4. Dogs 5 Cats 6. Guinea Pigs 7 Hamsters 8. Rabbits 9. Non-Human Primates 10. Sheep 11. Pigs 12. Other Farm Animals 13. Other Animals

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional

ASSURANCE STATEMENTS

sheets if necessary.)

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

1	N BY HEADQUARTERS RESEARCH FACILITY OFFICIAL ve Officer or Legally Responsible Institutional official)	
1	the above is true, correct, and complete (7 U.S.C. Section 2143)	
SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED
		10/24/2001

Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0055 CUSTOMER NO. 1312

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

 HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

HEALTHONE 1850 HIGH STREET DENVER, CO 80218 (303) 839-6821

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

See Attached Listing

HealthONE
5125 North Stapleton Dr.
Denver, Colorado 80216

A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anecthetic, analgesic, or tranquilizing drugs were used.	Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C+ . D+E)
4. Dogs			17		17
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12, Other Farm Animals					
13. Other Animals					
				OCT 6 2001	
				LISDA ADUIS DEAC AC	
				USDA, APHIS, REAC. AC SACRAMENTO. CA	

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

aspects of animal care and use.	
	CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Chief Executive Officer of Legally Responsible Institutional official)
SIGNA	,
1	2
APHIS	is
(AL	Per Previous Annual Aport
	11-8-01

APHIS Form 7023 Site List

The following sites have been reported by the facility.

Registration Number:

84-R-0055

Customer Number:

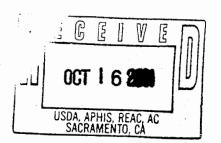
1312

Facility:

HEALTHONE

1850 HIGH STREET DENVER, CO 80218 (303) 839-6821

HEALTHONE 5125 NORTH STAPLETON DRIVE DENVER, CO 80216



Interaguncy Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. REGISTRATION NO.

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

CUSTOMER NO. 84-R-0056 1765

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

UNIVERA PHARMACEUTICALS, INC. 100 TECHNOLOGY DRIVE, STE. 160 BROOMFIELD, CO 80021 (303) 438-8666

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research	, testing, teaching, or experimentation, or held for these purposes. Attach additional	
sheets if necessary.)		
FACILITY LOC	ATIONS(sites)	

See Attached Listing

Broomfiel	ld CO 8	2001			
		F RESEARCH FACILITY	(Attach additional sheets if nece	ssary or use APHIS FORM 7023A)	
A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					0
5. Cats					0
6. Guinea Pigs	0	4	0	0	4
7. Hamsters					\ <u>\</u>
8. Rabbits					0
9. Non-Human Primates					0
10. Sheep					Ò
11. Pigs					0
12. Other Farm Animals					0
	,				0
13. Other Animals					\bigcirc
				1. w/s	
				NOV 2B 2001	
ASSURANCE STATEMENTS				THE STATE OF	

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

			(Chief Execu	tive Officer or	Legally Respons	ARCH FACILITY OF sible Institutional or other (7 U.S.C. Section 21	fficial)	
SIGNAT	(119	/ S	. 1			NL (Type or Print)	DATE SIGNED X6V. 17, 2001

APHIS FORM 7023

(Replaces VS FORM 18-23 (Oct 88), which is obsolete

PART 1 - HEADQUARTERS

(AUG 91)

/ -/7-/22 Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0057 CUSTOMER NO. 1783

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

BOLDER PATH, INC.

UNIV. OF COLORADO AT BOULDER MCDB CAMPUS BOX 347 BOULDER, CO 80309 (303) 735-5001

 REPORTING FACILITY (List all locations where animals were housed or used in actual research, sheets if necessary.) 	testing, teaching, or experimentation, or held for these purposes. Attach additional
FACILITY LOCA	TIONS(sites)
See Attached Listing	

A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					·
5. Cats					
6. Guinea Pigs	10	10	158		168
7. Hamsters				·	
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals				A selection of the sele	<u></u>
13. Other Animals					
				OCT - 4 2001	
				USDA, APHIS, REAC, AC	

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions; as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

(Chief Executi	BY HEADQUARTERS RESEARCH FACILITY OFFICIAL ve Officer or Legally Responsible Institutional official) ne above is true, correct, and complete (7 U.S.C. Section 2143)	
SIGNATURE OF CE O OR INSTITUTIONAL OFFICIAL	I NAME & TITLE OF C.E.O. OF INSTITUTIONAL OFFICIAL (Time of Print)	9/25/01

APHIS Form 7023 Site List

The following sites have been reported by the facility.

Registration Number:

84-R-0057

Customer Number:

1783

Facility:

BOLDER PATH, INC.

UNIV. OF COLORADO AT BOULDER

MCDB CAMPUS BOX 347 BOULDER, CO 80309

(303) 735-5001

BOLDER PATH, INC. MCD BIOLOGY TRANSGENIC'S ANIMAL FACILITY BOULDER, CO 80309



Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0058 CUSTOMER NO. 1784

FORM APPROVED OMB NO. 0579-0036

PART 1 - HEADQUARTERS

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)
 A M C CANCER RESEARCH CENTER

1600 PIERCE STREET
LAKEWOOD, CO 80214
(303) 239-3561

· · · · · · · · · · · · · · · · · · ·	·		•	(303) 239-3561	
REPORTING FACILITY (List a sheets if necessary.)	all locations where animals	were housed or used in	actual research, testing, teaching	g, or experimentation, or held for these purposes. Attach a	ditional
sneets it necessary.			FACILITY LOCATIONS(sites)		
See Attached Listing			FACILITY EDGATIONS(SILES)		
Occ / madrica sicality				•	
				· · · · · · · · · · · · · · · · · · ·	
		• •			
		•		1	
REPORT OF ANIMALS USED BY	OR UNDER CONTROL O	F RESEARCH FACILITY	(Attach additional sheets if nece	essary or use APHIS FORM 7023A)	
A. Animals Covered	B. Number of animals being bred.	C. Number of animals upon which teaching.	Number of animals upon which experiments, teaching, research,	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress	F. TOTAL NO.
By The Animal Welfare Regulations	conditioned, or held for use in teaching, testing, experiments,	research, experiments, or tests were conducted	surgery, or tests were conducted involving accompanying pain or distress to the animals	to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research,	OF ANIMALS (Cols. C + D + E)
	research, or surgery but not yet used for such purposes.	involving no pain, distress, or use of pain- relieving drugs.	and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	
4. Dogs	·				
5. Cats					
6. Guinea Pigs			-		
7. Hamsters	·				
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs	·				
12. Other Farm Animals					
13. Other Animals					
mice		12 11	12		1223
rati	1	288			588
rais	i	300			700
ASSURANCE STATEMENTS					
	indards governing the care	, treatment, and use of a	nimals, including appropriate use	of anesthetic analgesic, and Canquillain artugs, prior to,	during,
	; teaching, testing, surgery	r, or experimentation wer	e followed by this research facility		
This facility is adhering to the principal investigator and app	standards and regulations proved by the Institutional A	s under the Act, and it has Animal Care and Use Con	nmittee (IACUC). A summary of	standards and regulations be specified and explained by the	! ?
	r this research facility has a			is, as well as the species and himber of animals affected veterinary care and to oversee the adequacy of other	-
aspecta of grinnal calls affil to	CERTIFIC		QUARTERS RESEARCH		
			r Legally Responsible I	1.9.0 Section 2143\ "	
SIGNA				ype or Print)	DATE SIGNED

APHIS Form 7023 Site List

The following sites have been reported by the facility.

Registration Number:

84-R-0058

Customer Number:

1784

Facility:

A M C CANCER RESEARCH CENTER

1600 PIERCE STREET LAKEWOOD, CO 80214

(303) 239-3561

AMC CANCER RESEARCH CENTER 1600 PIERCE STREET LAKEWOOD, CO 80214

Laris

Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0060 CUSTOMER NO. 1835

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

sheets if necessary.)

 HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

UNIVERSITY OF COLORADO-BOULDER DEPARTMENT OF ANIMAL RESOURCES CB 26 BOULDER, CO 80309

(303) 492-2890
3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional

FACILITY LOCATIONS(sites)

See Attached Listing

BAMALEY BIOLOGY

A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cols. C + D + E)
4. Dogs					
5. Cats					
6. Guinea Pigs					
7. Hamsters	500		635	-8-	635
8. Rabbits					
9. Non-Human Primates					
10. Sheep				再看着着着	
11. Pigs				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
12. Other Farm Animals				NOV 2 0 2001	,
13. Other Animals				USDA SACRAMENTO DA	
SPERMOPHILUS- SROUND SOUIRREL	Đ	-0-	20	0	20
DEER MOUSE	0	8	-	. 0	8

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL
(Chief Executive Officer or Legally Responsible Institutional official)
I certify that the above is true, correct, and complete (7.11.5.C. Section 2143)

DATE SIGNED

EADQUARTERS

(AUG 91)

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ANIMAL RESOURCES

Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. REGISTRATION NO. 84-R-0061

CUSTOMER NO. 10643

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA, include Zip Code)

THE VETERINARY REFERRAL CENTER OF COLORADO 3550 S. JASON ST.

ENGLEWOOD, CO 80110

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.)

FACILITY LOCATIONS(sites)

AGENT FOR VETERINARY REFERRAL CENTER OF COLO. ENGLEWOOD, CO 80110

A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C. Number of animals upon which leaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report)	F. TOTAL NO. OF ANIMALS (Cois. C + D + E)
4. Dogs		18	6		24
5. Cats					
6. Guinea Pigs					
7. Hamsters					
8. Rabbits					
9. Non-Human Primates					
10. Sheep					
11. Pigs					
12. Other Farm Animals					
13. Other Animals					

- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

CERTIFICATION	BY HEADQUARTERS RESEARCH FACILITY OFFICIAL		
(Chief Executive Officer or Legally Responsible Institutional official)			
I certify that th	e above is true, correct, and complete (7 U.S.C. Section 2143)		
SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED	
1	1	11/26/2001	

APHIS FORM 7023 (AUG 91)

(Replaces VS FORM 18-23 (Oct 88), which is obsolete

PART 1 - HEADQUARTERS

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Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84-R-0062 CUSTOMER NO. 11855

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA,

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

include Zip Code)

MESA STATE COLLEGE
1100 NORTH AVENUE
GRAND JUNCTION, CO 81501

3. REPORTING FACILITY (List ail locations where animals were housed or used in actual research, testing, teaching, or experimentation, or held for these purposes. Attach additional sheets if necessary.) FACILITY LOCATIONS(sites) MESA STATE COLLEGE GRAND JUNCTION, CO 81501 REPORT OF ANIMALS USED BY OR UNDER CONTROL OF RESEARCH FACILITY (Attach additional sheets if necessary or use APHIS FORM 7023A) E. Number of animals upon which teaching, B. Number of C. Number of D. Number of animals upon experiments, research, surgery or tests were animals being animals upon which experiments, conducted involving accompanying pain or distress TOTAL NO. teaching, research, bred. Animals Covered which teaching. to the animals and for which the use of appropriate OF ANIMALS conditioned, or research, surgery, or tests were By The Animal anesthetic, analgesic, or tranquilizing drugs would Welfare Regulations held for use in experiments, or conducted involving have adversely affected the procedures, results, or (Cols. C+ teaching, testing, accompanying pain or tests were experiments, conducted distress to the animals interpretation of the teaching, research, D + E) experiments, surgery, or tests. (An explanation of research, or involving no and for which appropriate the procedures producing pain or distress in these surgery but not anesthetic, analgesic, or pain, distress, or animals and the reasons such drugs were not used yet used for such use of paintranquilizing drugs were must be attached to this report) purposes. relieving drugs used. 4. Dogs 5. Cats 6. Guinea Pigs 7. Hamsters 8. Rabbits Non-Human Primates 10, Sheep 11. Pigs 12 Other Farm Animals 13. Other Animals 75 16 16 Deer Mice 13 White Footed Mice

- Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anesthetic, analgesic, and tranquilizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all the exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

	BY HEADQUARTERS RESEARCH FACILITY OFFICIAL		
(Chief Executive Officer or Legally Responsible Institutional official) I certify that the above is true, correct, and complete (7 U.S.C. Section 2143)			
SIGNATURE OF C.E.O. OR INSTITUTIONAL OFFICIAL NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)			
		11/15/2001	

APHIS FORM 7023 (AUG 91)

ASSURANCE STATEMENTS

(Replaces VS FORM 18-23 (Oct 88), which is obsolete

PART 1 - HEADQUARTERS

and the consideration of the contract of the contract of

This report is required by law (7 USC 2143). Failure to report according to the regulations

See attached form for additional information

Interagency Report Control No.:

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. CERTIFICATE NUMBER: 84-R-0007

CUSTOMER NUMBER: 1086

FORM APPROVED OMB NO. 0579-0036

ANNUAL REPORT OF RESEARCH FACILITY (TYPE OR PRINT)

Colorado Serum Company :4950 York Street

Telephone:

(303)295-7527

Denver, CO 80216

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, or experimentation, or held for these purposes. Attach additional sheets if necessary)

A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in leaching, testing, experiments, research, or surgery but not y	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, a	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to	F. TOTAL NUMBER OF ANIMALS (COLUMNS C + D + E)
l. Dogs	0	0	0	0	0
5. Cats	0	0	0	0	0
6. Guinea Pigs	26	236	186	1203	1625
7. Hamsters	0	0	0	166	166
3. Rabbits	4	0	170	0	170
9. Non-human Primate					
0. Sheep					
1. Pigs					
2. Other Farm Animals					
3. Other Animals					
ASSURANCE STATEMENTS					

IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.

4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal ca

• • • • • • • • • • • • • • • • • • • •	•		
	CERTIFICA (Chief Ex	TION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL ecutive Officer or Legally Responsible Institutional Official)	
SIGNA	FICIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print	DATE SIGNED
			11-6-00

APHIS

8-23 (OCT 88), which is obsolete.

Colorado Serum Company License No. <u>84-R-0007</u>

For FY 1999 – 2000 Annual Report of Registered Research Facility – APHIS Form 7023

Each animal in each referenced test was employed in testing a Licensed Veterinary Biological product as required by Federal Regulations as codified in Title 9 CFR. Humane euthanasia of animals on 9 CFR required tests are provided for in Federal Register publication dated August 21, 1995 citing part 117.4(d) – Animals at Licensed Establishments – test animals (filed August 18, 1995) has been initiated and included as standard testing protocol. Attending veterinarians and related employees have been informed and Colorado Serum Company is complying with this regulation.

Explanation of usage of animals listed in Column E.

Line Item 6.

Guinea Pigs

1203 Guinea Pigs were tested causing pain, for which no anesthetic, analgesics, or tranquilizers could be used. A detailed breakdown of guinea pigs by test reference is provided.

9 CFR 113.451(d)	Tetanus Antitoxin potency testing – 917
	guinea pigs.

ACV 3 2000

ATTACHMENT NO. 1

Page 2 of 1999 - 2000 report

Colorado Serum Company License No. 84-R-0007

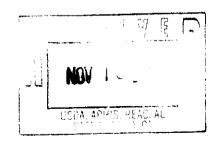
Line Item 7.

Hamsters

166 Hamsters were tested causing pain, for which no anesthetics, analgesics, or tranquilizers could be used. A detailed breakdown of hamsters by test reference is provided.

9 CFR 113.101	Leptospira Pomona Bacterin testing – 40 hamsters.	potency
9 CFR 113.102	Leptospira Icterohaemorrhagiae potency testing – 46 hamsters.	Bacterin
9 CFR 113.103	Leptospira Canicola Bacterin testing – 40 hamsters.	potency
9 CFR 113.104	Leptospira Grippotyphosa potency testing – 40 hamsters.	Bacterin

//-6-00 Date



This report is required by law (7 USC 2143). Failure to report according to the regulations

additional information

Interagency Report Control No.:

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE 1. CERTIFICATE NUMBER: 84-R-0045

FORM APPROVED OMB NO. 0579-0036 CUSTOMER NUMBER: 1096

ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

Colorado Division Of Wildlife

6060 Broadway

Telephone:

(303)297-1192

Denver, CO 80216

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, or experimentation, or held for these purposes. Attach additional sheets if necessary)

FACILITY LOCATIONS (Sites) - See Atached Listing

Α.	B. Number of	C. Number of	D. Number of animals	E. Number of animals upon which teaching,	: F.
Animals Covered By The Animal Welfare Regulations	animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not y	animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain- relieving drugs.	upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, a	experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to	TOTAL NUMBER OF ANIMALS (COLUMNS C + D + E)
4. Dogs	: na				
5. Cats	N.A				
6. Guinea Pigs	NA.			į	:
7. Hamsters	na				
8. Rabbits	· nr				
9. Non-human Primate	na		-		
0. Sheep	na				
1. Pigs	na				:
2. Other Farm Animals					
cattle		-	_		11
3. Other Animals				:	
bighan sheep	33			6	وا
elk	4	19	_		19
mule deer		29	-	31	60
ASSURANCE STATEMENTS	5			5 5 .	

- actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal ca

			
_		BY HEADQUARTERS RESEARCH FACILITY OFFICIAL e Officer or Legally Responsible Institutional Official)	12/1 11-27-00
S	CIAL	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Pr	int DATE SIGNED
_			11/20 (00)
A	-23 (OCT 88), which is obsolete	e .	

(AUG 91)

Interagency Report Control No 0180-DOA-AN

UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE

1. REGISTRATION NO. 84- K-0045

FORM APPROVED OMB NO 0579-0036

CONTINUATION SHEET FOR ANNUAL REPORT OF RESEARCH FACILITY

(TYPE OR PRINT)

Colorado Division of Wildlife

2. HEADQUARTERS RESEARCH FACILITY (Name and Address, as registered with USDA

bobo Broadway
Denver co 80216

REPORT OF ANIMALS USED BY OF	UNDER CONTROL OF	F RESEARCH FACILITY	(Attach adictitional sheets if ne	cessary or use this form)	,
A. Animals Covered By The Animal Welfare Regulations 12 &OR 13. Other (Ust by species)	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not yet used for such purposes.	C Number of animals upon which leaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drings.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, analgesic, or tranquilizing drugs were used.	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to this report.	TOTAL NO. OF ANIMALS (Cols. C + D + E)
pronghom antelope	10		-	***	ø
white-tailed deer white-tailed prairie day domestic ferret		3	-	7	10
white - toiled prairie day	_	30	-	_	30
domestic ferret	21	-		-	Ø
·					,
	·				
					·
	· · · · · · · · · · · · · · · · · · ·				
ASSURANCE STATEMENTS					

- 1). Professionally acceptable standards governing the care, freatment, and use of animals, including approriate use of anesthetic, analgesic, and tranquitizing drugs, prior to, during, and following actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2). Each principal investigator has considered alternatives to painful procedures.
- 3). This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the Institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report in addition to identifying the IACUC approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4). The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal care and use.

difficult date and date.			
	(Chief Executive Office	ADQUARTES RESEARCH FACILITY OFFICIAL r or Legally Responsible Institutional Official) is true, correct, and complete (7 U.S.C. Section 2143).	
	i.	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print)	DATE SIGNED
			11/20/00

APHIS FORM 7023A (AUG 91)

SESTRAUCQUEH - 1 TRAS

Annual Report Site Listing:

Customer ID and Site Address:

Cust ID: 1096

4330 West Laporte Avenue Fort Collins, CO 80521 County: Larimer Telephone (970)472-4300

Column E Addendum

Explanation of animal uses involving unmitigated pain or distress

- 1. Chronic wasting disease (CWD) pathogenesis: Studies involved 5 mule deer and 7 white-tailed deer orally inoculated with infectious brain material. Handling and experimental procedures themselves were neither painful nor distressing. However, some ill-defined pain sensations and other adverse psychological manifestations may have arisen during the course of the disease [based on extrapolations from human transmissible spongiform encephalopathies (TSEs)]. No veterinary pharmaceuticals or other therapeutic regimens are recommended for treatment of animal TSEs, and it is unclear whether conventional analgesics would even be effective. Moreover, attempting to control elements of disease progression would have interfered with detection of clinical signs, and could alter the pathobiological processes under study. Instead, animals showing signs of severe clinical CWD were euthanized, as specified in study protocols on file.
- 2. Susceptibility of cattle to CWD: Study involved 26 mule deer and 11 domestic cattle naturally exposed to the CWD agent via confinement in outdoor paddocks where the disease is endemic. Handling and experimental procedures themselves were neither painful nor distressing. However, some ill-defined pain sensations and other adverse psychological manifestations may have arisen in mule deer during the natural course of the disease [based on extrapolations from human transmissible spongiform encephalopathies (TSEs)]. No veterinary pharmaceuticals or other therapeutic regimens are recommended for treatment of animal TSEs, and it is unclear whether conventional analgesics would even be effective. Moreover, attempting to control elements of disease progression would have interfered with detection of clinical signs, and could alter the pathobiological processes under study. Instead, animals showing signs of clinical CWD were euthanized, as specified in study protocols on file. (Note: Based on preliminary data available to date, it is unlikely that the cattle in this study will ever become infected with CWD; however, they are counted in column E of the report as a matter of completeness.)
- 3. Evaluation of a modified-live Pasteurella haemolytica vaccine in bighorn sheep: Study involved 6 bighorn sheep exposed to vaccine and/or pathogenic strains of Pasteurella haemolytica. Handling and experimental procedures themselves were neither painful nor distressing. However, some pain or distress may have arisen in bighorns that developed respiratory disease after exposure to vaccine and/or pathogenic strains of Pasteurella haemolytica. Attempting to control elements of disease progression with conventional therapeutic regimens prescribed for pneumonic pasteurellosis would have interfered with evaluation of vaccine efficacy, and could have altered the pathobiological processes under study. Instead, animals showing signs of severe respiratory disease were euthanized, as specified in study protocols on file.

See attached form for

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UNITED STATES DEPARTMENT OF AGRICULTURE

1. CERTIFICATE NUMBER:

FORM APPROVED OMB NO. 0579-0036

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

84-R-0059 CUSTOMER NUMBER: 1834

ANNUAL REPORT OF RESEARCH FACILITY (TYPE OR PRINT)

University Of Colorado (Hsc) 4200 E. 9th Avenue, Box A-095

Telephone:

(303)315-2595

Denver, CO 80262

FACILITY LOCATIONS (Sites) - See Atached Listing

3. REPORTING FACILITY (List all locations where animals were housed or used in actual research, testing, or experimentation, or held for these purposes. Attach additional sheets if necessary)

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A. Animals Covered By The Animal Welfare Regulations	B. Number of animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery but not y	C. Number of animals upon which teaching, research, experiments, or tests were conducted involving no pain, distress, or use of pain-relieving drugs.	D. Number of animals upon which experiments, teaching, research, surgery, or tests were conducted involving accompanying pain or distress to the animals and for which appropriate anesthetic, a	E. Number of animals upon which teaching, experiments, research, surgery or tests were conducted involving accompanying pain or distress to the animals and for which the use of appropriate anesthetic, analgesic, or tranquilizing drugs would have adversely affected the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests. (An explanation of the procedures producing pain or distress in these animals and the reasons such drugs were not used must be attached to	F. TOTAL NUMBER OF ANIMALS (COLUMNS C + D + E)
4. Dogs	!		77		
5. Cats					 ! 0
6. Guinea Pigs			143	53	196
7. Hamsters		-			0
3. Rabbits		25	95	56	176
). Non-human Primate	102			. 8	8
0. Sheep			164	16	180
1. Pigs			61		61
2. Other Farm Animals				•	
3. Other Animals					

ASSURANCE STATEMENTS

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- 1) Professionally acceptable standards governing the care, treatment, and use of animals, including appropriate use of anestetic, analgesic, and tranquilizing drugs, prior to, during, and follows: actual research, teaching, testing, surgery, or experimentation were followed by this research facility.
- 2) Each principal investigator has considered alternatives to painful procedures.
- 3) This facility is adhering to the standards and regulations under the Act, and it has required that exceptions to the standards and regulations be specified and explained by the principal investigator and approved by the institutional Animal Care and Use Committee (IACUC). A summary of all such exceptions is attached to this annual report. In addition to identifying the IACUC-approved exceptions, this summary includes a brief explanation of the exceptions, as well as the species and number of animals affected.
- 4) The attending veterinarian for this research facility has appropriate authority to ensure the provision of adequate veterinary care and to oversee the adequacy of other aspects of animal ca

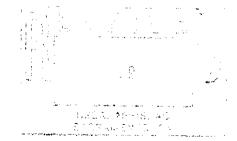
	CERTIFICATION BY HEADQUARTERS RESEARCH FACILITY OFFICIAL (Chief Executive Officer or Legally Responsible Institutional Official)	
	NAME & TITLE OF C.E.O. OR INSTITUTIONAL OFFICIAL (Type or Print	DATE SIGNED
•		11/27/0
<i>‡</i>	aich is obsolete	

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Cust ID: 1834

4200 E. 9th Ave. Denver, CO 80220 County: Denver Telephone (303)315-2595



CATEGORY E STUDIES

1. Sheep exposed to heat stress - 16 sheep

Description of Procedures:

Pregnant sheep are placed in an environmental chamber that cycles room temperature between 40-40.5 °C for 12-14 hours/day and 35 °C for the remainder of the day from day 33-35 of gestation until day 90-115. Humidity in the chamber is 45-50%. Animals are housed in standard cages with ad lib water and food. For safety, the heating system is equipped with an alarm and automatic cut-off system.

Explanation of Reasons Why Pain- or Distress- Reliving Drugs Were Not Used:

The procedure is designed to mimic a naturally occurring phenomenon, namely, pregnancy in hot climates where fetal intrauterine growth retardation is a common problem. The animals in the chamber under these conditions give no visual or clinical indication of stress. They eat and drink normally; their stool pattern is also normal; and their wool continues to grow. The procedure does alter placental development, but since altered placental development is not known to be associated with pain or distress in any species, use of any drug or other treatments would be speculative and possibly problematic for fetal development.

2. Rabbits exposed to E. coli - 56 rabbits

Description of Procedures:

This is a study of the effects of exposure to bacteria during the birth process. The goal of the protocol is to determine, after intra-cervical inoculation of pregnant rabbits with E. coli and treatment with antibiotics, the extent of tissue damage over time and whether therapeutic intervention with IL-1a reduces fetal injury. Timed pregnant rabbits at 70% gestational age are anesthetized and inoculated intra-cervically with 10³ to 10⁴ CFU E. coli and treated with ampicillin sulbactam. At 1, 3 and 5 days after inoculation, the animals are euthanized and the tissues evaluated. In another group, rabbits are given IL-1ra or saline each day (iv; ear vein) for 5 hours each day. This study requires an iv drip for 5 hours/day, therefore restraint is needed for the constant infusion. After consultation with the University Veterinarian, a wire rabbit box without neck restraint was chosen. The rabbits are gradually acclimated to this restraint over a 5 day time period. At 1, 3 and 5 days, animal are euthanized and the tissues evaluated.



Explanation of Reasons Why Pain- or Distress- Reliving Drugs Were Not Used:

It is important to understand the risk of maternal and newborn infection. It is therefore necessary to allow the experiment to continue until it can be determined whether or not the does and neonatal rabbits become infected by exposure to bacteria during the birth process. Antibiotics and IL-1ra treatment given to mothers before delivery may be an effective treatment. The difference in outcome of animals given IL-1ra and those not treated is the focus of these studies. Drugs given to relieve any possible distress would mask the degree of infection and interfere with the immunoassays to be done, therefore none are given.

3. Decapitation without prior anesthesia in guinea pigs – 53 guinea pigs

Description of Procedures:

Bradykinin affects many different tissues in the body. For effective drug development, new antagonists must be tested in a standard "classic" assay system. In this protocol, guinea pigs are euthanized by decapitation without prior anesthesia. Segments of the terminal ileum are then removed and hung in a tissue bath. Tissue responses are standardized with bradykinin, and then new potential antagonists are applied to the tissue to see if they block the action of the next standard ED_{50} dose of bradykinin applied to the tissue.

Explanation of Reasons Why Pain- or Distress- Reliving Drugs Were Not Used:

Bradykinin is a peptide hormone involved in causing many serious kinds of inflammation, such as septic shock. The Investigators are developing new, more potent bradykinin antagonists as potential new drugs for these conditions. Isolated guinea pig ileum is the classical standard assay system for bradykinin. In order to compare results with new compounds, they must first be tested in this system. No one has described a more humane procedure that doesn't require anesthesia. Anesthesia adversely affects the response of the tissue. This has been demonstrated in the Investigators' laboratory, as well as in other laboratories. Additionally, the Investigator has tried using carbon dioxide anesthesia and found that the stress caused by this process causes bradykinin to be released in the tissues, such that an adequate baseline cannot be obtained.

4. Maternal-Infant separation in non-human primates - 2 mothers and 2 infants (M. nemistrima; for a total of 4 primates)

Description of Procedures:

When infants are 6 months old, mothers are removed from the social group for one separation period that lasts two weeks. During this time the infant is immunized with

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tetanus toxoid and blood is sampled biweekly. The infant remains with its social group during separation.

Explanation of Reasons Why Pain- or Distress- Reliving Drugs Were Not Used:

It is the effect of maternal-infant separation, which is being studied, so any psychoactive intervention to relieve the behavioral impact would negate the results of the study.

5. Parkinsonian Syndrome in non-human primates - 4 monkeys (M. radiata)

Description of Procedures:

The Parkinsonian syndrome is induced when MPTP-HCL is infused into the carotid artery to produce a stable unilateral lesion in the monkey. A dose of 0.8 mg/kg MPTP-HCL dissolved in 50 cc of sterile normal saline infused into the carotid artery over 20 minutes leads to unilateral dilation of the pupil and a weak arm and leg contralateral to the side of the lesion and sensory neglect on that side. The animals are infused at a rate of 2 ml/minute using a 30 gauge needle with the infusion in the direction opposite the normal arterial blood flow. Analgesics are given to all animals for any post-operative pain. The result of the surgical procedure is a weak arm and leg and sensory neglect on the side opposite the lesion. (Water bottles are adjusted for this disability.) Thus, once monkeys have been lesioned, abilities such as locomotion, visual fields, grasping, climbing, etc. are impaired. In addition, the lesioned animals are sensitive to sound and have an enhanced startle response. After the lesioning procedure has produced the hemiparkinsonian effect, each animal is assessed daily for any pain. L-dopa is given as needed to assist the animal in daily routine procedures. In addition, monkey's food intake is carefully assessed and animals are hand fed if necessary until they have learned to adapt to their limitations. Daily fruit, sunflower seed, pomegranate seeds, peanuts, etc., are provided to occupy their foraging behavior. The post transplant state lasts about six to eight months. As the animals become more adept with their routine movements, more foraging materials and additional toys are introduced.

Explanation of Reasons Why Pain- or Distress- Reliving Drugs Were Not Used:

To study the effective treatment of Parkinson's disease, an animal model of the disease is essential. There are currently no effective long-term treatments for this disease and therefore no way to completely eliminate the distress that may be associated with the physical limitations imposed by this disease. It is the goal of this study to test a treatment that may effectively cure the monkeys and, ultimately, human beings.

EXCEPTIONS TO REGULATIONS

The IACUC has approved an exception to the policy regarding multiple surgeries, specifically the placement of maternal and fetal catheters in sheep. The goal of the protocol is to determine how fetal glucose and plasma insulin availability regulate fetal energy and amino acid metabolism and thereby lead to changes in fetal growth. For the 2-3 week chronic studies, an initial surgery is done to catheterize the mother's femoral artery and vein. The catheters allows the Investigators to produce, by IV infusion, the necessary metabolic conditions (e.g. insulin-induced hypoglycemia; glucose induced hyperglycemia). The fetus is too small to catheterize at this time, and maintaining patency of fetal catheters for more than 2 weeks is very difficult. Thus, a second surgery to place uterine and fetal catheters is done when the fetus is big enough and close enough to final study. The fetal catheters are then used for infusions in both hyperglycemic and hypoglycemic studies. Within the last reporting period, twenty-three- sheep have had multiple surgeries for placement of maternal and fetal catheters.

The USDA Sector Supervisor has approved an exception to the policy regarding multiple survival surgeries, specifically multiple Cesarean sections in Bonnet monkeys (letter dated 6/29/94). There is currently a moratorium on the importation of Bonnet monkeys. Therefore, multiple surgeries will use the fewest possible number of a rare species. No multiple Cesarean sections were performed during this reporting period under this exception. Furthermore, no non-human primates received a Cesarean section in the past year.